



Commissioner for Patents, P.O. Box 1450, Mail Stop Reissue  
Alexandria, VA 22313-1450  
Applicant(s): Shen et al  
US Patent No: 5,573,648  
US Reissue Patent Application No.: TBA  
Title: Gas Sensor Based on Protonic Conductive Membranes

Atty. PDM  
Docket No.: 011361.00064  
Issue Date: 11/12/96  
US Reissue Filing Date: 07/17/03

The following has been received in the U.S. Patent and Trademark Office on the date stamped hereon:

Transmittal Letter        pages (in duplicate)  
 Specification        pages:  
 claims,        independent claims,        abstract  
 Drawings [ ] formal [ ] informal        sheets  
 IDS 2 pages, PTO-1449 1 page, 17 references  
 Declaration & POA [ ] signed [ ] unsigned        pages  
 Small Entity Statement        pages  
 Certificate of Express Mail 1 page

Amendment/Response        pages  
 Petition for Extension        months  
 Preliminary Amendment        pages  
 Request for Corr. Filing Recpt  
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Other       

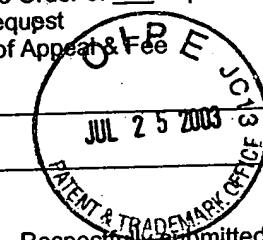
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Respectfully submitted,  
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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
(Attorney Docket No. 011361.00064)

Patentee: **Shen et al.**

Assignee: **Atwood Mobile Products, Inc.**

U.S. Patent No.: **5,573,648** Date Issued: **November 12, 1996**

Application No.: **381,718** Date Filed: **January 31, 1995**

Reissue Application No.: **TBA** Reissue Filing Date: **July 17, 2003**

Title: **GAS SENSOR BASED ON PROTONIC CONDUCTIVE MEMBRANES**

\*\*\*\*\*

Mail Stop Reissue  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**CERTIFICATE OF EXPRESS MAIL FOR REISSUE APPLICATION**

Dear Sir:

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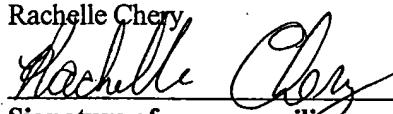
Date of Deposit: **25 July 2003**

I hereby state that the following:

- (1) Information Disclosure Statement (2pgs);
- (2) PTO 1449 Form (1pg);
- (3) Copies of 17 citations; and
- (4) Return-Receipt Postcard

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. § 1.10, on the date indicated above and is addressed to the Mail Stop Reissue, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Signature of person mailing paper or fee

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**(Attorney Docket No. 011361.00064)**

**Patentee:** **Shen et al.**

**Assignee:** **Atwood Mobile Products, Inc.**

**U.S. Patent No.:** **5,573,648**      **Date Issued:** **November 12, 1996**

**Application No.:** **381,718**      **Date Filed:** **January 31, 1995**

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Mail Stop Reissue  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

Dear Sir:

In accordance with the provisions of 37 C.F.R. § 1.56 and 1.97, applicant herewith submits the publications and/or patents shown on the attached form PTO-1449, for consideration by the Examiner in connection with the examination of the above-identified reissue patent application.

**REMARKS**

In accordance with the provisions of 37 C.F.R. § 1.97, this statement is being filed (CHECK ONE):

X (1) within three (3) months of the **Filing Date** or before the mailing date of the **First Office Action** on the merits; or

— (2) after the period defined in (1) but before the mailing date of a **Final Rejection or Notice of Allowance**, and the requisite Certification or fee under Rule 1.17(p), namely \$180.00, is included herein; or

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Reissue Application of U.S. 5,573,648

(3) after the mailing date of a **Final Rejection or Notice of Allowance** but before the payment of the **Issue Fee**, and the requisite Certification, petition, and petition fee are included herein.

It is respectfully requested that each of the citations shown on the attached form PTO-1449 be made of record in this application. Copies of each of these citations (CHECK ONE):

X are enclosed herewith except no copy of the cited text in the Liquid Electrolyte Fuel Cells citation is currently available; or

— are in the file of related application Serial No. 00/000,000, filed \_\_\_\_\_, and are thus not being resubmitted herein.

Early examination and allowance of the present application are respectfully solicited.

#### **FEE AUTHORIZATION**

The Commissioner is hereby authorized to charge any fee associated with this document to **Deposit Account No. 19-0733**. Any overpayments should be credited to same Deposit Account.

Respectfully submitted,

*Christopher R. Rhodes (Reg. No. 47,022) for Peter D. McDermott*  
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INFORMATION DISCLOSURE CITATION  
Sheet 1 of 1

Applicants: Shen et al.

Issue Date: November 12, 1996

Group:

## U.S. PATENT DOCUMENTS

Examiner Initial		Patent No.	Date	Name	Class	Subclass	Filing Date (if appropriate)
	AA	5,573,648	Nov. 12, 1996	Shen et al.			
	AB	4,664,757	May 12, 1987	Zupancic et al.			
	AC	5,164,053	Nov. 17, 1992	Razaq et al.			
	AD	5,322,602	Jun. 21, 1994	Razaq			
	AE	4,718,991	Jan. 12, 1988	Yamazoe et al.			
	AF	5,650,054	July 22, 1997	Shen et al.			
	AG	4,227,984	Oct. 14, 1980	Dempsey et al.			
	AH	5,266,421	Nov. 30, 1993	Townsend et al.			
	AI	5,474,857	Dec. 12, 1995	Uchida et al.			
	AJ	4,820,386	Apr. 11, 1989	LaConti et al.			
	AK	3,134,697	May 26, 1964	Niedrach			
	AL	5,330,860	Jul. 19, 1994	Grot et al.			
	AM	4,804,592	Feb. 14, 1989	Vanderborgh et al.			
	AN	5,302,274	Apr. 12, 1994	Tomantschger et al.			

## FOREIGN PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Country	Class	Subclass	Translation	
							YES	NO
	AO							

## OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)

	AP	"Nafion Distribution in Gas Diffusion Electrodes for Solid-Polymer-Electrolyte-Fuel-Cell Applications"; Z. Poltarzewski, P. Staiti, V. Alderucci, W. Wieczorek, and N. Giordano; J. Electrochem. Soc., Vol. 139, No. 3, March 1992; pgs. 761-765
	AQ	"Preparation of High-Platinum-Utilization Gas Diffusion Electrodes for Proton-Exchange-Membrane Fuel Cells"; E. J. Taylor, E.B. Anderson, and N.R.K. Vilambi; ElectroChemical Society Letters; Vol. 139, No. 5, May 1992; pgs. L45-L46
	AR	"Liquid Electrolyte Fuel Cells"; by B.S. Hobbs, A.D.S. Tantram and R. Chan-Henry; Techniques and Mechanisms in Gas Sensing; by P.T. Moseley, J.O.W. Norris and D.E. Williams; Materials and Manufacturing Technology Division, Harwell; Adam Hilger; 1991 pgs. 161-188
	AS	Skoog, Principles of Instrumental Analysis, 3 <sup>rd</sup> Edition. P. 665, 1985

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant. \*\*Copies of references not provided at the time of this submission.